

18-644 Fall 2013 Project Proposal: GPS Bus Tracker

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Abstract

1. The Problem

Public transportation can be an important asset to any city. If widely used, it can improve air quality, reduce traffic congestion, and more importantly provide transportation for those who do not have cars. However, in Pittsburgh (and many other cities across the country) the public transportation is very unreliable. The bus system posts schedules, but can rarely stick to them. This can cause up to an hour delay between the scheduled time and the bus arrival time. For many people, this uncertainty makes the bus system practically unusable. Because of this, fewer and fewer people are using public transportation regularly. This results in the bus company earning less revenue and consequently reducing the number of bus routes. If this trend continues, bus companies will not be able to stay in business, leaving many people without any mode of transportation.

2. Importance

-increase in revenue for bus companies

3. Competition

Name	Limitation
Google Maps	Only posts scheduled times
CTA Bus Tracker	Chicago specific (not easily expandable)
Tiramisu	Relies on individuals to report bus activity (crowdsourced)
Maimi-Dade Bus Tracker	Miami Specific, Only tracks a single route

4. Our Idea

5. Benefits of Our Idea

-Reliable, uses hw not crowdsourcing -Easily set up in any city
(if routes tied into google maps) -Cost effective

References